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Based on the above Amendment and the following Remarks, Applicants respectfully request that the Examiner reconsider all outstanding rejections, and that they be withdrawn.

Rejections under 35 U.S.C. §103

At paragraph 2 of the Office Action (Paper No. 18), the Examiner rejected independent claim 1 under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent No. 5,365,265 to Shibata et al. ("Shibata") in view of U.S. Patent No. 5,821,987 to Larson ("Larson") and U.S. Patent No.5,396,554 to Hirano et al. ("Hirano"). More particularly, in the Office Action, the Examiner stated:

Regarding claim 1, Shibata discloses [a] multipoint teleconference system employing [a] communication channel set in ring configuration comprising: audio and video capture devices (210,200 - fig. 2) for capturing video images and spoken audio of a participant in a video conference, a monitor in 200 for displaying video images associated with at least one participant, [and] audio reproduction devices (fig. 2, col. 3 lines 66-68, col. 4 lines 1-20).

Shibata differs from the claimed invention by not showing the following: a unitary housing and an adaptive echo canceler, wherein the audio capture and reproduction devices are integrated into the unitary housing in a fixed spatial relationship with respect to each other and cooperate with the adaptive echo canceler to reduce echo during the reproduction of audio.

However, Larson discloses [a] videophone for simultaneous audio and video communications via a standard telephone line which teaches a unitary housing with audio capture and reproduction devices integrated into the unitary housing in a fixed spatial relationship with respect to each other (fig. 8A, col. 26 lines 5-67, col. 23 lines 1-3)

Hirano discloses multichannel echo canceling method and apparatus which teaches an adaptive echo canceler (fig.3, col. 21 lines 42-67, col. 22 lines 1-10).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Shibata's system to provide for the following: a unitary housing as this would provide a compact arrangement for video conference and an adaptive echo canceler, wherein the audio capture and reproduction devices are integrated into the unitary housing in a fixed spatial relationship with respect to each other and cooperate with the adaptive echo canceler to reduce echo during the reproduction of the audio as this would facilitate clear audio reception for the benefit of conference participants.



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In rejecting Applicants' independent claim 1, the Examiner relies on Larson for the teaching of a unitary housing. The unitary housing of Larson is illustrated in FIG. 8A as a conventional desk phone device. The Examiner then relies on Hirano for the teaching of an adaptive echo canceler. Applicants note that the teachings of Hirano appear to be directed to the application of an adaptive echo canceler to a conferencing system that includes multiple microphones (for multiple speakers) and multiple loudspeakers (for multiple participants). See, col. 1, lines 14-50 of Hirano. Thus, the adaptive echo canceler of Hirano does not appear to be directed to unitary-housing devices.

In combining the teachings of Larson with the teachings of Hirano, the Examiner does not state a clear motivation to combine the teachings of Hirano and Larson. Notwithstanding the differences in operational environments, the Examiner merely states that Hirano and Larson are combinable for the purpose of reducing "echo during the reproduction of audio as this would facilitate clear audio reception for the benefit of conference participants." The Examiner does not address the motivational basis for including an adaptive echo canceler within a unitary-housing teleconferencing device.

In general, the principles of the present invention enable the creation of a new class of desktop teleconferencing system. This new class of device is in sharp contrast to conventional room-sized conferencing systems. In view of conventional conferencing systems existent at the time of invention, the creation of a stand-alone conferencing system factored in numerous considerations of size, cost, portability, etc., which bore on the feasibility of a marketable device.

As noted above, the Examiner's rejection based upon the combination of Hirano and Larson does not address a proper motivation to combine the references. Significantly, the application of adaptive echo canceling to a new class of conferencing device within a unitary

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housing cannot be trivialized. Applicants therefore submit that the Examiner has not satisfied his burden of presenting a prima facie case of obviousness. The rejection of independent claim 1 is therefore traversed.

Applicants note that the Examiner's rejection of claim 7 appears to be based upon the same base combination of Larson and Hirano. For at least the reasons stated above, the rejection of claim 7 is also traversed. Dependent claims 2-6, 9, and 11-15 are also traversed for at least those reasons stated above.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections, and that they be withdrawn. The Examiner is invited to telephone the undersigned representative if an interview might be useful for any reason.

Dated:

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